

LETTERS

Nuclear Accident 'Scenarios' $\neq$ 'Risks'

The scenarios described in your special report "Severe Accident Scenarios at Issue in DOE Plan to Restart Reactor" (November, page 78) are important to study, and as the report clearly states, *they have been studied!* But "risk" is a product of consequences and probability. It is hardly defensible to portray the ability to identify worst-case scenarios as the same as real risks that should govern decisions about design and operation of facilities.

The point is that without fuel melting, there is zero probability of any significant release of radioactivity. The way the special report deals with this basic reality typifies the tone problem: "As long as the fuel does not melt, the thinking goes, the issues of cladding-coolant or fuel-coolant interactions, hydrogen generation and recriticality or prompt criticality never arise." There isn't much of a story left!

The special report mentions that each of these scenarios is highly unlikely, and even tells why. But the tone implies that the Conway committee, the Meserve group, and Argonne and Sandia National Laboratories were all afraid of restarting any Savannah River reactors. To the contrary, after extensive study, the conclusions were that the probability of those scenarios is so low that the risks are acceptable. That is the real message about the safety of the heavy-water-moderated reactors with aluminum-clad fuel that operate at low temperature and low pressure for a specific purpose.

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12/91

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'Surplusing' Aging Industrial Physicists

James Scott (September, page 11) appears to argue in his letter that just as qualified Russians who entered physics as students aged 18 or 22 were until recently assured of a career (for what it was worth) in science, so too are American physics PhDs, provided

they succeed in securing appropriate employment at age 27 or 30.

To a great many veteran physicists and other science "professionals" engaged in industrial R&D, this view would seem visionary. Very commonly, at age 50 or so, such longtime corporate employees find their hitherto stable careers poised on the edge of a slippery slope. As never before, their project proposals bog down in bureaucratic ooze; scientific publication, always difficult at best, becomes impossible or impolitic; invitations to participate in technical symposiums have to be declined for the simple reason that they cannot with impunity be disclosed to management; even self-financed attendance at scientific meetings is strictly taboo. These unfortunates are counseled to forget creativity, which smacks of unseemly ego gratification, and concentrate on "productivity"—which, translated roughly, means solicitude, in all things, to the boss and the boss's image as purveyed to his superiors. As often as not, however, adopting the prescribed low profile still is not enough to permit escape from what is tactfully called early retirement, or, in personnel managers' parlance, "surplusing." Either way it means loss of occupation.

F. Scott Fitzgerald claimed that in American lives there are no second acts, that is to say, no development of the human potential revealed in act 1. Happily, this is seldom the case for scientific workers in American industry. But having performed with due panache in act 2, they then discover that come act 3, where a satisfactory denouement is arranged for everyone else, they've been written out of the script.

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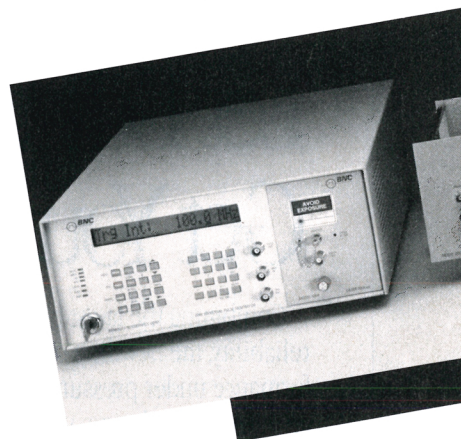
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Is Space Station Getting a Fair Hearing?

NASA's Space Station Freedom is becoming a political football between Congress and the Administration. In May 1991, the House Appropriations Subcommittee on the Veterans Administration, Housing and Urban De-

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